

L 9862-61 EWP(j)/EPF(c)/EWT(m)/BDS--ASD/ESD-3--Pc-1/Pr-1--RM/MM/MAY/JFW
 ACCESSION NR: AP3001352 S/0048/63/021/006/0748/0753 71

AUTHOR: Nagornaya, L. L.; Nurmukhametov, R. N.; Malkes, L. Ye.; Shubina, L. V.

TITLE: Luminescence of naphthyl and anthryl derivatives of ethylene [Report of the Eleventh Conference on Luminescence held in Minsk from 10 to 15 September 1962]

SOURCE: AN SSSR. Izv. Seriya fizicheskaya, v. 27, no. 6, 1963, 748-753

TOPIC TAGS: ethylene derivative scintillators, arylethylenes, fluorescence quenching by UV

ABSTRACT: Some aryl derivatives of ethylene are known to be efficient luminophors and are used for the preparation of crystal and plastic scintillators. Increase of the pi-electron system conjugated with the ethylene grouping has been reported to increase the luminescence efficiency. Accordingly, the authors investigated the effect of alpha-naphthyl and 9-anthryl radicals on the luminescence of arylethylenes and made an attempt to elucidate the nature of the photochemical processes involved. There were obtained the luminescence spectra at 20°C and

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77°K of crystalline powders and different solutions of 1,2-di(alpha-naphthyl)ethylene, 1-phenyl-2(9-anthryl)ethylene, 1-(alpha-naphthyl)-2-(9-anthryl)ethylene and two stereoisomers of dianthrylethylene. Also the influence of UV irradiation on the stability and optical characteristics of the specimens was studied. The spectra are described and in part reproduced in the figures. The absorption and fluorescence spectra of the first compound in heptane and polystyrene at 20°C are reminiscent of the spectra of stilbene, but shifted somewhat to the red side. The fluorescence of the compounds decreases with time under UV irradiation. It is hypothesized that the decrease is connected with trans-cis isomeric photo-transformation. The relatively low scintillation yield of the investigated arylethylenes in solutions is explained by enhancement of nonradiative processes owing to occurrence of hindered rotations and the associated process of photostereoisomerization. In the solid phase these processes are inhibited and the fluorescence yields and scintillation efficiencies increase accordingly. Orig. art. has: 5 figures and 1 table.

ASSOCIATION: none

Card 2/3

ACCESSION NR: AP4042267

S/0089/64/017/001/0067/0070

AUTHOR: Bezuglyy, V. D.; Nagornaya, L. L.

TITLE: Effect of irradiation on the stability of plastic scintillators

SCIENCE: Atomnaya energiya, v. 17, no. 1, 1964, 67-70

TOPIC TAGS: plastic scintillator, plastic phosphor, organic phosphor, polymer phosphor system, polystyrene scintillator, poly(vinyltoluene) scintillator, poly(vinylxylene) scintillator, radiation stability, scintillation characteristic

ABSTRACT: The aging process in irradiated solid plastic scintillators has been studied with the purpose of selecting the most radiation-stable organic polymer-phosphor systems and of establishing the radiation-damage mechanism. Scintillation characteristics of two-component and three-component systems composed of a polymer and one or two phosphors were determined before and after γ -irradiation of the plastic scintillator samples in the K-1600 apparatus at the Institut fizicheskoy khimii AN USSR (Institute of Physical Chemistry, AN USSR). The

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radiation dose varied from 5×10^4 to 8×10^6 rad. It was established that in all systems studied, 1) the minimum γ -radiation dose which did not produce any significant change in scintillation characteristics was in the range from 0.5×10^5 to 10^5 rad, and 2) the light yield decreased with increasing radiation dose. At equal radiation doses, the light yield of polystyrene-base scintillators recovered partially and that of poly(vinylxylene)-base scintillators, completely after aging in the air. The extremely important role of oxygen in the recovery of scintillation characteristics of irradiated samples was made clear by comparing their characteristics after aging in air and in vacuum. It was concluded that poly(vinylxylene)-base scintillators are the least susceptible to radiation damage in systems with identical phosphors, followed by poly(vinyltolene)- and polystyrene-base scintillators in that order. With equal radiation doses and identical polymer components, the most radiation-stable systems were those with 1, 2-aryl-ethylenes or paraterphenyl, and least stable, those with heterocyclic (1,3-oxazole, 2,4,6-triazine) derivatives as phosphor components. The three-component systems with paraterphenyl as the basic phosphor and an aryl-ene derivative as the secondary phosphor were the most stable, since to

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the increased efficiency of energy transfer from the polymer to the
luminescent admixture. Orig. art. has: 6 tables and 3 figures.

ASSOCIATION: none

SUBMITTED: 02Sep63

ATD PRESS: 3084

ENCL: 00

SUB CODE: OP, MT

NO REF SOV: 004

OTHER: 003

Card 3/3

ANDER, G.V.; NEMTSUKHANEVA, R.R.; NAGORNAYA, L.I.

Electronic and vibrational spectra of some crystalline
at 77°K. 'hur. fiz. khim. 38 no.5:1142-1147 by '64.

1. Fiziko-khimicheskiy institut imeni Karпова. submitted
May 3, 1963.

NURMEKHAMETOV, E.B.; TIMOFEEV, A.M.; ZHURINA, L.M.; KARLOVA, L.L.

Spectroscopic study of diarylethylenes. Zhur. 112, 2015, 32
no. 10:2465-2469 (1971) (XIF: 12:2)

1. Fiziko-khimicheskiy institut imeni L.Ya. Karlova.

MALKES, I.Ya.; HUBINA, I.V.; NAGORNAYA, L.L.

Synthesis of 9-anthryl derivatives of ethylene. Zhur.org.khim.
1 no.3:587-589 Mr '65. (MIRA 18:4)

L 8213-66 EWT(1)/EWT(m) EWP(1)/EWA(h)/EWA(1) LIP(c) WW/GG/EM
 ACC NR: AP5013864 SOURCE CODE: UR/0368/65/002/004/0371/0373
 44,55 44,55 44,55 44,55
 AUTHOR: Tsirlin, Yu. A.; Daych, A. R.; Sokolovskaya, T. I.; Nagornaya, L. L. 32
 ORG: none
 TITLE: Determining the effective coefficient of light absorption in long plastic scintillators
 SOURCE: Zhurnal prikladnoy spektroskopii, v. 2, no. 4, 1965, 371-373
 21, 44, 55
 TOPIC TAGS: scintillator, light absorption, gamma luminescence, luminescent material
 ABSTRACT: It is shown that the attenuation in the scintillator material of light emitted by that scintillator may be determined only by measuring the luminescence spectrum, spectral sensitivity of the photocathode which detects the radiation, and spectral coefficient of absorption of the scintillator material throughout the entire range of wavelengths emitted by the scintillator. An experimental method is described for direct determination of the "effective" coefficient of absorption. The transmittance of α -stimulated light is measured in long cylinders of scintillation plastic. In a second set of experiments, the transmittance of light stimulated by a collimated beam of γ -rays is measured. The results are given in graphic form. A formula is derived for the transmission factor as a function of length. Orig. art. has: 3 figures, 5 formulas.
 SUB CODE: OP,NT/ SUBM DATE: 16Sep64/ ORIG REF: 006/ OTH REF: 000
 Cord 1/1 UDC: 535.344

L 65229-65 EPF(c)/EWT(1)/EWT(m)/EWP(j) IJP(e) RM

ACCESSION NR: AP5021490

UR/0368/65/003/002/0156/0161 32
535.344 30
B.4.5

AUTHOR: Tsirlin, Yu. A.; Sokolovskaya, T. I.; Nikulina, R. A.; Nagornaya, L. L.

TITLE: Luminescence yield of plastic scintillators as a function of external electron energy

SOURCE: Zhurnal prikladnoy spektroskopii, v. 3, no. 2, 1965, 156-161

TOPIC TAGS: scintillator, polystyrene, thermoplastic material, luminescent material

ABSTRACT: The luminescence yield L of various plastic scintillators was studied as a function of electron beam energy E . The measurements were made on the apparatus shown schematically in fig. 1 of the Enclosure. An electron beam from source 1 is accelerated in tube 2 to an energy of 70 keV and falls on the plastic scintillator 6 which is mounted on an FEU-13 photomultiplier placed in a vacuum chamber. The beam is irised down twice on its path to a final spot size of 3 mm on the specimen. More light was collected by using aluminum reflector 5. The plastic scintillators studied were divided into the following four groups: 1) with different

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bases and identical primary and secondary additives in optimum concentrations for the given base; 2) with the same base but with various primary additives in optimum concentrations; 3) with the same base and the same primary additive in various concentrations; 4) with identical bases and identical primary additives, but different secondary additives. Plastic scintillators from these groups were made in the form of polished cylinders 18 mm in diameter and 2 mm high. The results are tabulated and also given graphically. The luminescence yield of these plastic scintillators is not proportional to the external electron energy, and the specific light output L/E is a variable in the low energy range from 0 to 70 kev. It was found that polyvinyl xylene and polystyrene bases are nearly identical in their degree of proportionality, which is higher than that of a polyvinyl toluene base (see fig. 2a of the Enclosure). The proportionality factor depends on the type and concentration of the primary additive (see figs. 2b and 3 of the Enclosure). Secondary additives have only a slight effect on the degree of proportionality: $3P-\Delta^2$ is somewhat more effective (see fig. 2 and table 1 of the Enclosure). Orig. art. has: 4 figures, 2 formulas, 1 table.

ASSOCIATION: none

SUBMITTED: 24Aug64

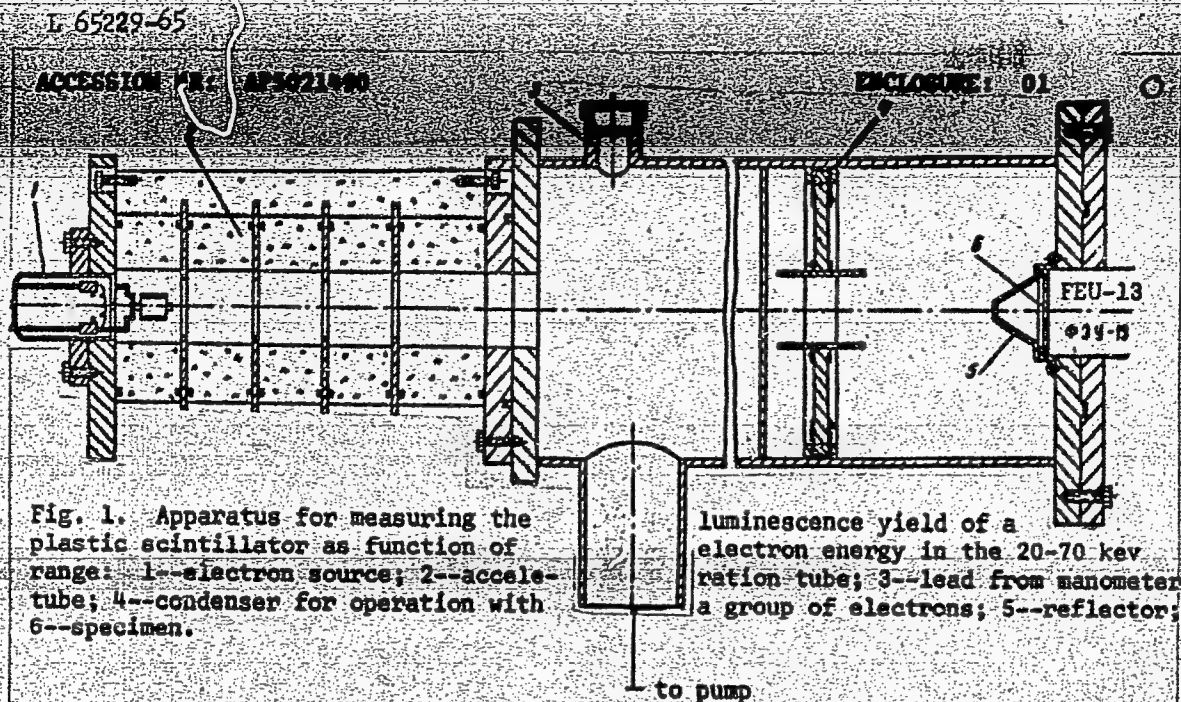
ENCL: 05

SUB CODE: *OP* NP

NO REF SOV: 005

OTHER: 005

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ACCESSION NR: AP5021490

ENCLOSURE: 02

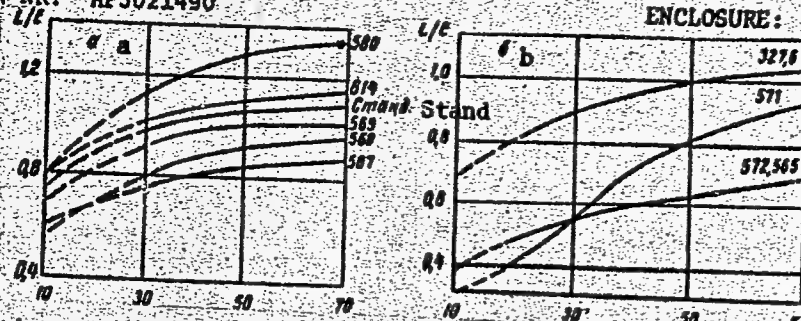


Fig. 2

Scintillation efficiency L/E (relative units per keV) as a function of electron energy E (keV): a--plastic scintillators in groups I and IV (No 580--polyvinyl toluene base + 2% PPP + 0.1% POPOP; No 614--polyvinyl xylene base + 2% PPP + 0.1% POPOP; standard--polystyrene base + 2% PPP + 0.1% POPOP; No 569--polystyrene + 2% PPP + 3P- Δ^2 ; No 568--polystyrene + 2% PPP + BPO; No 567--polystyrene + 2% PPP + BBE); b--plastic scintillators with polystyrene bases and various primary additives in optimum concentrations: (No 327--PPP; No 6--BaNE; No 571--BPO; No 565--2DF; No 572--PPO)

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ACCESSION NR: AP5021490

ENCLOSURE: 03

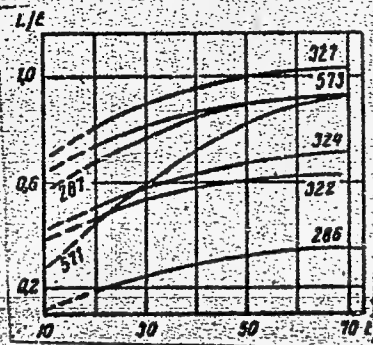


Fig. 3. Scintillation efficiency L/E (relative units per kev) as a function of electron energy E (kev) in polystyrene-based plastic scintillators with various concentrations of BPO and PPP as primary additives (group III): No 287--0.5% BPO; No 571--1.5% BPO; No 286--0.1% BPO; No 573--2% PPP; No 327--1.5% PPP; No 324--1.0% PPP; No 322--0.5% PPP

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L 65229-65

ACCESSION NR: AP5021490

ENCLOSURE: 04

Table 1 Plastic scintillator characteristics

Group No	Chemical composition of the plastic scintillator **	Degree of proportionality, %
I	Polystyrene + 2% PPP + 0.1% POPOP	68
	Polyvinyl xylene + 2% PPP + 0.1% POPOP	70
	Polyvinyl toluene + 2% PPP + 0.1% POPOP	59
II	Polystyrene + 1.5% PPP	66.5
	Polystyrene + 1.5% 2DF	57
	Polystyrene + 1.5% BPO	32
	Polystyrene + 1.5% PPO	58.5
	Polystyrene + 1.5% BaNE	65.5
III	Polystyrene + 0.1% BPO	40
	Polystyrene + 0.5% BPO	59
	Polystyrene + 1.5% BPO	32
	Polystyrene + 0.5% PPP	62
	Polystyrene + 1% PPP	61.5
	Polystyrene + 1.5% PPP	67
	Polystyrene + 2% PPP	68.5
	Polystyrene + 2% PPP + 0.1% POPOP	68
	Polystyrene + 2% PPP + 0.1% BBO	57.5
	Polystyrene + 2% PPP + 0.1% SP-Δ ²	77
Card 6/7	Polystyrene + 2% PPP + 0.04% BBE	68

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**PPP--p-terphenyl; POPOP--1,4-di-(5-phenyl)-oxazolyl-1,3-benzene; DF--2-(diethyl-phenyl ether)-5-phenyl-oxadiazole-1,3,4; BPO--2-phenyl-5-(4-biphenyl)-oxazole-1,3; PPO--2,5-diphenyl-oxazole-1,3; BBO--2,5(p-biphenyl)-oxazole-1,3; 3P- Δ^2 --1,3,5-triphenyl-pyrazolin; BBE--1,2-di-(4-biphenyl)-ethylene; BaNE--1-(4-biphenyl)-2-(α -naphthyl)-ethylene

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L 15958-66 EWT(m)/EMP(1)/T WW/RM

ACC NR: AP60C1485

SOURCE CODE: UR/0368/65/003/006/0571/0573

AUTHOR: Tsirlin, Yu. A.; Sokolovskaya, T. I.; Nikulina, R. A.; Nagornaya, L. L.
Malkes, L. Ya.; Shubina, L. V.

ORG: None

TITLE: Plastic scintillator with a light yield proportional to the energy of outer electrons

SOURCE: Zhurnal prikladnoy spektroskopii, v. 3, no. 6, 1965, 571-573

TOPIC TAGS: scintillation, polystyrene, vinyl plastic, electron emission

ABSTRACT: Earlier studies of plastic scintillators investigated the relationship between the light yield and the energy of inner (I. M. Rozman et al., PTE, 6, 27, 1960) and outer (Yu. A. Tsirlin et al., ZhPS, 3, 156, 1965) electrons. The present study attempts to establish the amount of additives (PBE, BPO, or PPP) which will result in the highest degree of proportionality defined as $(L/E)_{30 \text{ kev}} / (L/E)_{70 \text{ kev}}$. 100 (L - light yield, E - incident energy). The polystyrene + 1% PBE showed the highest light yield in the 0-20 kev region and it was, at the same time, proportional to the energy of the outer electrons. It is thus very convenient for the detection of low energy electrons. The other base tested was polyvinylxylene. 5

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UDC: 535.35

L 15958-66

ACC NR: AP6001485

which yielded a somewhat weaker degree of proportionality. Orig. art. has:
1 formula, 2 figures, and 2 tables.

SUB CODE: 07 / SUBM DATE: 02Nov64 / ORIG REF: 002

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Card 2/2

L 21173-65 EWG(j)/EWT(m)/EPF(c)/EWP(j)/EWA(h)/EWA(1) Pc-l/Pr-l/Peb RPL/
 ASD(a)-5/AFWL/SSD(c)/BSD/AS(mp)-2/APGC(b)/ESD(gs) RM S/0051/65/018/001/0109/0114
 ACCESSION NR: AP5003030

AUTHOR: Nurmukhametov, R. N.; Nagornaya, L. L. FB

TITLE: Connection between spectra and structure of molecules of luminors used in scintillators

SOURCE: Optika i spektroskopiya, v. 18, no. 1, 1965, 109-114

TOPIC TAGS: absorption spectrum, fluorescence spectrum, organic luminor, plastic scintillator

ABSTRACT: To be able to interpret the nature of absorption and luminescence bands, and to determine the general features in the spectra of aryl ethylenes, oxazoles, and oxadiazoles, which are used as luminors in plastic scintillators, the authors measured at room temperature the absorption spectra of heptane solutions and the fluorescence spectra in heptane and polystyrene, for which fluorescence absorption spectra were described by one of the authors elsewhere (Nagornaya with L. Ya. Malkes and L. V. Shubina, Opt. i spektr. v. 12, 644, 1962). The results show that the luminescence spectra in polystyrene are shifted on the average by

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ACCESSION NR: AP5003030

5--10 nm towards the longer wavelengths as compared with the bands in the heptane solutions. The distinguishing features of the various spectra are discussed in light with results obtained by others in similar investigations. A general feature of all the spectra is the predominance of the $\pi-\pi^*$ band and the possible presence of a $n-\pi^*$ band. The nature of the long-wave shift of the bands is briefly discussed. Orig. art. has: 3 figures.

ASSOCIATION: None

SUBMITTED: 22Oct63

ENCL: 00

SUB CODE: OP

NR REF SOV: 009

OTHER: 003

Card 2/2

NAGORNAYA, L.I.; MNATSAKANYA, T.R.; GREKOV, A.P.; SHVAYKA, O.I.

Photoluminescence and scintillation properties of certain
1,3,4-oxadiazole derivatives. Opt. i spektr. 18 no.3:403-

406 Mr '65.

(MIRA 18:5)

L 24258-66 EWT(m)/ENP(j)/T WW/RM

ACC NR: AP6007834

SOURCE CODE: UR/0120/66/000/001/0188/0190

AUTHORS: Chernobay, A. V.; Pimakhov, A. S.; Nagornaya, L. L.; 34
Kolesnikov, L. N. B

ORG: VNII of Single Crystals, Khar'kov (VNII monokristallov)

TITLE: Plastic scintillators with increased heat endurance

SOURCE: Pribery 1 tekhnika eksperimenta, no. 1, 1966, 188-190

TOPIC TAGS: scintillator, heat resistant plastic, block copolymer, styrene, benzene

ABSTRACT: The article describes a method of preparing plastic scintillators with heat endurance up to 110C, based on co-polymers of styrene with divinyl benzene with different classes of luminors. The plastic scintillators were produced by block polymerization in glass ampoules in an atmosphere of nitrogen. The scintillation efficiency was measured with a photomultiplier in response to excitation

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UDC: 535.373.12

L 24258-66

ACC NR: AP6007834

to gamma rays from Co⁶⁰, relative to a polystyrene block with p-terphenyl (2%) + POPOP (0.1%). The Wick method was used to test for heat endurance. An investigation of heat-induced aging of the scintillators has shown that the most stable against aging are 'joined' plastic scintillators with 1, 1, 4, 4-terphenyl-butadiene-1, 3; 1- α -naphthyl, 2- β -naphthyl ethylene, and 2-(4-biphenyl), 5-(α -naphthyl), oxazole-1, 3. In all cases, heating the plastic scintillators reduces the scintillation efficiency appreciably. It is concluded that joining together the polymerizing base of the scintillator by means of divinyl benzene increases the heat endurance of the scintillator. Orig. art. has: 2 tables.

SUB CODE: 20// SUBM DATE: 06Feb65/ ORIG REF: 003/

Card

2/2 *ada*

111 AND 112 (COPES)

PROCEDURE AND PROPERTIES INDEX

B I 8

Change in properties of silica gel during washing, as a result of changes in its sub-micro-structure. V. K. MARKOV and N. A. MACHURAJA (J. Appl. Chem. Russ., 1967, 20, 968-969).—The pore diameter of SiO_2 gel prep. from an acid medium rises when the gel is washed with dil. aq. alkali; at the same time the adsorptive capacity (Q) for H_2O vapour falls. The reverse changes take place when the alkaline gel is washed with dil. acid. When the gel is dried at 100°C the val. of Q is $<$ at room temp., and this is due to the greater pore diameter. Due to smaller γ of H_2O at the higher temp. Sorption of H_2O by amorphous porous gels is due largely to capillary condensation, whilst in finely-porous gels a preponderating role is played by adsorption on the adsorbent surface. R. T.

488.514 METALLURGICAL LITERATURE CLASSIFICATION

FROM SCHENK

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BC

Determination of the group composition of colloids in some Fandir cells. L. B. Smolina and V. Nagornaja (Pedology, 1941, No. 1, 61-64).—Besides the usual group-I and -II colloids, a group-"0" fraction reversible in H₂O was separated from serosoma. Pipette analysis gave results which agreed well with those given by the decantation methods. S. and F. (m)

0.3-1

1960. KAROMAYA, I. A., LEBEVA, V. V., and SIKHIN, I. V.

ELYKTROKHEMIYASKAYA OTTRET' I KHIMICHESKAYA KONTAKY LYCHENIYA
KHORULACHEN BE LKOV. SIKHINYA, 1949, VII. 6, S. 517-23. - BIBLIOG:
S. 523.

A *116*

Electrochemical reversibility and acid-base denaturation of globular proteins. I. N. Bulankin, S. A. Nagurnaya, and E. V. Parina (Kharkov Univ., Ukraine). *Biochimica 16*, 517-23 (1949). cf. C.A. 36, 6332. It is generally admitted that with a protein like gelatin or casein, the viscosity, elec. cond., swelling, and other phys. chem. properties are at a min. at the isoelec. point, and gradually increase on approaching the acid and alk. sides. But there is considerable controversy as to whether this rule also holds for globular type proteins like albumins and globulins. Egg albumin, serum albumin, and horse serum globulin were investigated over a pH range of 1-12 for viscosity, surface tension, and optical activity. The isoelec. point for these proteins is a wide zone, extending from pH 4.7 to pH 10, in which range the viscosity, surface tension, and optical activity do not change, and denaturation does not occur. Beyond this zone, the protein is partly denatured. This was proved by the rate of tryptic fermentation of the acid and base proteins after neutralization. When a globular protein was once outside the pH range of 4.7-10, and then brought back to the isoelec. point by dialysis, a part of the protein irreversibly coagulated. The pH range 4.7-10 is of great importance, since going beyond these limits means death to most water organisms and tissue cultures.

H. Priestley

Clear Biochem

NAGORNAYA, N. A.
~~NAGORNAYA, N. O.~~

✓ The mechanism of gel formation in acid-base denaturation. I. N. Bulankin, N. O. Nagornaya, R. V. Parina, and A. M. Timkovitska (A. M. Gor'kiy State Univ., Kharkov, USSR). *Biochim. Zhur.* 27, 267-74 (Russian summary, 275-A) (1956). — Two sets of test tubes of same diam. were used. To each tube of the first set was added 1 ml. of 5% egg albumin and to each tube of the second set 1 ml. of 10% horse serum pseudoglobulin. Each of the sets was then divided into two subsets for the acid and alk. expts., resp. In the acid expt. 0.2 ml. of 5% HCl was added to the egg albumin-contg. tubes, and 0.2 ml. of 10% HCl to the pseudoglobulin-contg. tubes. In the alk. expts. 0.1 ml. of 10% NaOH was added alike to the egg albumin and pseudoglobulin-contg. tubes. To the tubes so acidified or alkalinized was added 0.4 ml. of 0.1N Na acetate, propionate, butyrate, valerate, caproate, or nonylate. To a series of control tubes contg. 1.0 ml. of egg albumin or pseudoglobulin soln. 0.4 ml. dist. H₂O was added. All tubes were rotated at intervals to det. the time of gel formation. The Na salts of the acids mentioned hastened the formation of the gel in the acidified mixts. and arrested it in the alkalin-

ized mixts., the intensity of effect exerted varying with the length of the C chain of the acid. Acids whose dissociation is depressed by HCl combine electrostatically via their hydrophilic groups with the amino groups or with the C bonds, and by screening the hydrophilic groups of the proteins at the same time increase the no. of such groups. In highly alk. medium the proteins are negatively charged and the fatty acids behave anionically, pointing to the fact that the hydrophobic terminal of the fatty acids, aided by the van der Waals' forces, combine with the hydrophobic side chains of the denatured proteins and increase the no. of ionogenic groups of the proteins, thereby exerting an arresting influence on the process of gel formation. Cyclic compds., such as phenol and benzoic acid, which in alk. medium act anionically, hasten the gel formation of acidified protein solns., while pyridine and aniline, which act cationically in acid medium, retard the gel formation in acid protein solns. and hasten the gel-formation process in alk. protein solns.

B. S. Levine

Cham Berchem

ACCESSION NR: AP4023497

S/0069/64/026/002/0174/0178

AUTHOR: Davy*dov, A. T.; Nagornaya, N. A.

TITLE: Studies of exchange sorption of organic cations as a function of their structure

SOURCE: Kolloidny*y zhurnal, v. 26, no. 2, 1964, 174-178

TOPIC TAGS: exchange sorption, sorption, desorption, organic cation, organic cation structure, KY 2 type electrolyte, aniline, para phenylenediamine, benzidine, alpha naphthylamine, volume equivalence, electrostatic mechanism, ion exchange mechanism, ion polarity, ion size, ionic symmetry

ABSTRACT: This study concerned exchange behavior between mineral and organic ions as related to their structure, size and the charge quantities. It was conducted in a strongly acidic cation-electrolyte of the KY-2 polymerized type in calcium form. The amines to be studied (aniline, p-phenylenediamine, benzidine, α -naphthylamine, p-toluidine and 4,4-diaminodiphenylmethane) were dissolved in hydrochloric acid at from 0.23 to 0.56 N, depending upon their sol-

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ACCESSION NR: AP4023497

ability. A mixture of 2 g sorbent and 100 ml amine solution was used for testing, i. e. determining the equilibrium concentration of calcium by means of trilon B, and the amine quantity by potentiometric titration with sodium nitrite. Sorption isotherms were calculated on the basis of these experimental data by the equation

$$a = a_m - K^{z_1} a \left(\frac{a}{Vc_0 - a} \right)^{z_2/z_1}, \quad (1)$$

where a is the desorbed ion quantity (mg equivalent/100 g), a_m the end sorption (mg eq. 100 g sorbent), c_0 initial concentration of the displacing ion (mg eq. / ml) K the exchange constant, z_1 and z_2 charges of the exchange ions, V solution volume. Experimental and theoretical results are tabulated and show volume equivalence to decrease considerably upon increase of amine concentration. The former was retained for up to 0.25 N concentration of the organic ion. Its disturbance was accompanied by surface-equivalent sorption of the organic ion, i. e. through the electrostatic (apolar ion part) rather than the ion exchange mechanism (polar part). Comparing calcium desorption by the various cations, e. g. p-phenylenediamine to aniline, that by the first was much higher, due to the

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ACCESSION NR: AP4023497

symmetrical location of the 2 polar centers with each about 1/2 the apolar charge and increased polarity due to the conjugated bonds between the amino groups, while aniline consists of a large apolar phenyl and a small ionogenic NH_3^+ cation. The increased number of aromatic rings in the α -naphthylamine ion influenced its sorbability compared to that of aniline at equal charges. Higher cation sorption in this case may also be due to the two-fold size of the apolar naphthylamine ion. The behavior of the other organic ions is discussed. The authors conclude that this ion exchange chromatographic method may be used to study structural features of organic ions. The behavior of single and double charged organic cations was characterized by the equivalent behavior of the ionogenic groups in the exchange reaction. Increase of phenyl groups in the cation also increased its sorption value. The exchange equivalence between calcium ions and organic cations was strictly retained only to 0.25 N. "We wish to thank Professor L. M. Litvinenko for his interest in this work and his valuable advice." Orig. art. has: 1 equation and 1 table.

ASSOCIATION: Khar'kovskiy universitet im. A. M. Gor'kogo (Kharkov University)

SUBMITTED: 05Sep63

DATE ACQ: 15Apr64

ENCL: 00

SUB CODE: GC

NO REF SOV: 009

OTHER: 006

Card 3/3

L 13909-66 EIT(1)/ETC(F)/EPF(n)-2/ENG(m) IJP(c) AT
ACC NR: AP6002357 SOURCE CODE: UR/0207/65/000/006/0047/0052

AUTHOR: Grechikhin, L.I. (Minsk); Min'ko, L. Ya. (Minsk); Nagornaya, N.I. (Minsk)

ORG: none

TITLE: Spectroscopic study of the properties of a supersonic plasma jet

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 6, 1965, 47-52

TOPIC TAGS: plasma jet, plasma temperature, shock wave propagation, plasma charged particle, spectroscopic analysis

ABSTRACT: The authors spectroscopically investigate the emission spectrum of a plasma jet at wavelengths from 3800 to 5500 A. The variation of the temperature and concentration of the charged particles along the jet was measured in relation to the polarity for a shock-wave jet and a periodic structure jet. In the spectrum of the shock-wave jet the authors observed a continuous spectrum at the base of the jet the intensity of which in the direction of flow noticeably diminishes and again increases jumplike in the shock wave and then abruptly falls off. In the spectrum of the periodic-structure jet there is an alternation of maxima and minima of intensities of the continuous spectrum and of the intensity of the spectral lines corresponding to compression and rarefaction points with a gradual weakening toward the end of the jet. The temperature in the plasma jet was determined by the method of relative intensities with the use of two pairs of copper lines. The temperature was measured along the jet both for the

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L 13909-66

ACC NR: AP6002357

jet with a shock wave and for the jet with a periodic structure, at the base and in the rarefaction and compression zones. The results of the measurements lay along a straight line, which proves the feasibility of a Boltzmann distribution of the atoms with respect to the excited levels. The concentration of charged particles in the periodic-structure jet was higher than in the shock-wave jet. This was due to the higher temperatures and pressures in the jet. Authors take this opportunity to express sincere gratitude to M. A. Yel'yashevich for discussing the results of the work. Orig. art. has: 4 figures and 1 table.

SUB CODE: 20 / SUBM DATE: 26Apr65 / ORIG REF: 008 / OTH REF: 002

OC
Card

2/2

L 02279-67 EWT()/EWP() LJP() WW AF

ACC NR: AP6025245

SOURCE CODE: UR/0057/66/036/007/1207/1210

AUTHOR: Grechikhin, L.I.; Min'ko, L.Ya.; Nagornaya, N.I.

ORG: none

TITLE: Spectroscopic investigation of the plasma in a conical-electrode shock tube

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 7, 1207-1210

TOPIC TAGS: plasma shock wave, shock tube, optic spectrum, electron density, Stark effect, Balmer series

ABSTRACT: The plasmas discussed in the accompanying paper by L.I.Grechikhin and L.Ya.Min'ko (ZhTF, 36, 1202, 1966 [see Abstract AP6025245]) were investigated spectroscopically in the range from 3800 to 7000 Å. Time integrated spectra were recorded of the light from the discharge chamber, the central region of the drift tube, and the reflection zone. These spectra showed that the plasmas had the same composition in all three regions and arose mainly from erosion of electrode and insulation materials in the discharge chamber. Electron densities were derived from the spectra in three different ways: from the depression of the Balmer series limit, from the linear Stark broadening of H β , and from the quadratic Stark broadening of CII 4267 Å. When two of the techniques were simultaneously applicable they gave concordant results. The charged particle densities were slightly higher in the reflection zone than in the

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UDC: 533.9.0

Card 2/2 vmb.

MACCHAYA, L. K.,

"Axial Forces in Hydrodynamic Bearings of Turbomachines of the Type of Cardan"
Sov. Eng. Des. Notes, Vol. 12, No. 1, 1976, pp. 1-4. (English translation of
Izv. Akad. Nauk SSSR Tekhn. Mekh., No. 1, 1976, pp. 1-4.)

1-70, 6-2-12-56

NAGORNAYA, N.K.

Structure of the flow in the circulation cycle of a hydraulic
coupling. Sbor. trud. lab. gidr. mash. no.7:97-112 '58.
(MIRA 12:9)

(Oil hydraulic machinery)

SOV/122-59-6-6/27

AUTHOR: Nagornaya, N.K., Candidate of Technical Sciences

TITLE: Procedure for the Determination of Errors in the Measurement of the Field of Velocities and Pressures in the Investigations of Flow in Fluid Dynamic Transmissions

PERIODICAL: Vestnik mashinostroyeniya, 1959, Nr 6, pp 22-25 (USSR)

ABSTRACT: The basic error is evaluated by comparing the torque computed from the measurement of velocities with pitot tubes and the torque measured on a swinging frame dynamometer. A method for computing the torque by finding the circulation values through numerical integration of the velocities is briefly stated. The total error is mainly the sum of the errors in the two principal components of velocity. Conversely, each velocity component error can be related to the torque error and the error in measuring the angle of the resultant velocity. The pressure-measuring error is related to the same quantities. The application of these principles in a toroidal fluid coupling as carried out by the author is discussed. The measured and computed torques at different transmission ratios are plotted (Figure 3). The largest discrepancy is about 8%. The comparison, on the assumption that

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SOV/122-59-6-6/27

Procedure for the Determination of Errors in the Measurement of the
Field of Velocities and Pressures in the Investigations of Flow in
Fluid Dynamic Transmissions

maximum angular errors amount to 1° yields the maximum
error in velocity measurement. The values given differ
for different velocity components and range up to 6%. The
maximum pressure measurement error can amount to 10% under
conditions of high slip.
There are 3 figures and 2 Soviet references.

Card 2/2

NAGORNAYA, N.K., kand.tekhn.nauk

Effect of rotor wheel rims on the external characteristics of a
reverse running transformer on a hydro-reversing transmission.
Sudostroenie 25 no.12:26-30 D '50. (MIRA 13:4)
(Hydraulic turbines) (Ship Propulsion)

NAGORNAYA, N.K., kand.tekhn.nauk

Investigating hydraulic impact losses and impact coefficients in
blade systems of hydraulic torque converters. Vest. mash. 41
no.6:23-27 Je '61. (MIRA 14:6)
(Oil hydraulic machinery)
(Hydrodynamics)

FILIPPOV, A.P., otv.red.; DEDUSYNKO, Yu.M., red.; NAGORNAYA, N.K., red.; BULGAKOV, V.N., red.; SYTRIK, N.K., red.; SHALAYEVA, S.A., mlad. red.

[Operating processes in turbomachines and the stability of their elements] Rabochie protsessy v turbomashinakh i prochnost' ikh elementov. Kiev, Naukova dumka, 1965. 172 p.
(MIRA 18:6)

1. Akademiya nauk URSS' Kiev. Instytut mekhaniky. Khar'kovskiy filial. 2. Chlen-korrespondent AN Ukr.SSR (for Filippov).

MIRPULATOVA, N.S., kand.sel'skokhoz.nauk; NAGORNAYA, N.M., nauchnyy sotrudnik

Early manifestation of wilt on cotton. Zashch. rast. ot vred. i
bol. 8 no.2:53 F '63. (MIRA 16:7)

1. Uzbekskiy institut zashchity rasteniy, Tashkent.
(Cotton wilt)

MIRPULATOVA, N.S., kand.sel'skokhoz.nauk; NAGORNAYA, N.M., mladshiy
nauchnyy sotrudnik

Methods of fungi preservation. Zashch. rast. ot vred. i bol. 9
no.3:43-44 '64. (MIRA 17:4)

1. Sredneaziatskiy institut zashchity rasteniy.

LIPSHITS, V.V. [Lipshyts', V.V.]; NAGORNAYA, S.S. [Nahorna, S.S.]

Possibility of using the fluorescence microscopy method for the
differentiation of living and dead cells in anaerobic bacteria.
Mikrobiol. zhur. 26 no.3:73-76 '64. (MIRA 18:5)

1. Institut mikrobiologii AN UkrSSR.

ROBINSON, G.L.; VAGNER, I.P.; SEMENOVA, T.N.

Some physicochemical properties of florimycin. Antibiotiki
no.7:587-592 1964. MIRA 12:3

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov,
Moskva.

NAGORNI, Vladimir

Our experience with conservative therapy of discal hernia.
Srpski arh. celok. lek. 91 no.12:1175-1185 D '63.

1. Odeljenje za medicinsku rehabilitaciju i ortopediju Opšte
bolnice "Mosa Pijade" u Leskovcu (Nacelnik: dr. Vladimir
Nagorni).

DOBROVOL'SKAYA, R.; NAGORNAYA, S.

Exhibition and sale in a workers' settlement. Sov. torg 33 no.10:
24-25 0 '59. (MIRA 13:1)

1.Starshiy inspektor otdela organizatsii trgovli univernaga, g.Gor'kiy
(for Dobrovol'skaya). 2.Starshiy tovaroved otdela tekstil'nykh tovarov
univernaga, g.Gor'kiy (for Nagornaya).
(Gorkiy--Department stores)

~~WAGORNAYA~~, T., master; KORNILOVA, M., red.; MALEK, Z., tekhn.red.

[Master workers in brickmaking] Mastersa kirpichnogo proizvodstva.
Izd-vo VTsSPS Profizdat, 1953. 60 p. (MIRA 12:2)

1. Formovochnyy tsakh Nizhne-Kotel'skogo kirpichnogo zavoda (for
Nago-naya).
(Brickmaking)

NAGORNAYA, T.G.

Readers' conference. Neftianik 2 no.8:34 Ag '57. (MIRA 10:10)

1. Zaveduyushchaya tekhnicheskoy bibliotekoy Bakinskogo zavoda
"Neftegaz" im. Budennogo.
(Rubber, Synthetic)

MAMIOFE, S.M. [deceased]; OPARYSHEVA, Ye.F.; GEFBENIK, M.D.; NAGORNAYA, T.N.;
PREGORATNENSKAYA, Ye.V.

Isolation, chemical purification and properties of florimycin
(viomycin). Antibiotiki 8 no.10:895-900 O '63. (MIRA 17:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.

BAYKINA, V.M.; KHOKHLOV, A.S.; MAMTOPL, S.K.; SINITSEVA, Z.T.; ANDRIANOVA,
V.T.; RYBAKOVA, N.K.; MAKOSHINA, T.N.

Counterflow distribution for detecting a new streptomycin-like
antibiotic produced by the L-1 strain of Str. griseus (Act.
streptomycini). Antibiotiki 7 no.2:112-117 F '62. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(STREPTOMYCIN) (ACTINOMYCIS)

15

CA

DETERMINING THE GROUP COMPOSITION OF COLLOIDS IN SOME
PAMIR SOILS. L. B. Smolina and V. Nagornaya. *Podzology*
(U.S.S.R.) 1941, No. 1, 61-4. Gray (semidesert) soils
were fractionated by water extrn. and followed by peptiza-
tion with Na either of NaCl or Na₂CO₃. The soils were
first treated with HCl to remove the carbonates. For the
HCl extrn. the pipet method was compared with decantation.
and the latter was not much different from the first. The
Kachinskii (C. I. 27, 1435) and International Soil Sci.
Na methods for the other groups were compared. I. S. 1-46

NAGORNAYA, V.I., kandidat geologo-mineralogicheskikh nauk.

Observations on soil moisture in southwestern Kyzyl-Kum (Uzbek S.
S.R.). Biul.SAGU no.27:19-27 '49. (MLBA 9:5)
(Kyzyl-Kum--Soil moisture)

NAGORNAYA, V.I.

Soils of the Ust'-Urt desert plateau in Kara-Kalpak. Trudy JAGU
no.25:107-153 '51. (MLDA 3:5)

(Ust'-Urt--Soils)

ORLOV, M.A.; MAGORNAYA, V.I.; PUSTOVOTT, S.N.

Fertility of genetic horizons of cultivated oasis soils, virgin
Sierozem soils and "duval" soils. Trudy SAGU no.60:69-86 '54.
(Soil fertility) (MLRA 9:11)

NAGORNAYA, YE. F.

Nagornaya, Ye. F. — "The Doroninskoye Soda Lake and Physicochemical Characteristics of Its Annual Cycles." Min Culture USSR, Irkutsk State U imeni A. A. Zhdanov, Chair of Analytical Chemistry, Irkutsk, 1954 (Dissertation for the Degree of Candidate in Chemical Sciences)

SO: Knizhnaya Letopis', No 24, 11 June 1955, Moscow, Pages 91-104

KARGIN, V.A.; MIRLINA, S.Ya.; MACORNAYA, Yu.F.

Study of the anisotropy of electroconductivity of polymer
electrolytes. *Vysokomol.soyed.* 1 no.2:191-200 1975.
(MIRA 17:10)

1. Moskovskiy gosuniversitet im. M.V.Lomonosova, Khimicheskiy
fakul'tet.
(Electrolytes--Conductivity) (Anisotropy)

BELYAYEVA, V.A.; DRITS, V.A.; ZAKHVALINSKIY, M.N.; LARINA, V.A.; NAGORNAYA,
Ye.F.; NIKULINA, S.Ye.; NAGORNYI, G.I.; SEMIUSOVA, T.N.

Characteristics of clays of the Troshkovskiy deposits of the
Irkutsk Province. Izv. Fiz.-khim. nauch.-issl. inst. Irk. un.
5 no.1:252-289 '61. (MIRA 16:8)

(Irkutsk Province—Clay—Analysis)

BELYAYEVA, V.A.; ZAKHVALINSKIY, M.N.; ZIMINA, T.D.; DEMINA, T.N.;
KALASHNIKOV, P.V.; NAGORNAYA, Ye.F.; NAGORNIY, G.I.; SITOVA, L.L.

Adsorption properties of Gynyil' argillites. Trudy SVFAN S.S.S.R.
Ser.khim. no.7:18-25 '65.

(MIRA 18:12)

3

L 5298-66 EWT(m)/EPP(e)/EMP(j)/T RPL WW/JW/PM
ACC NR: AP5025037 SOURCE CODE: UR/0286/65/000/016/0084/0084

AUTHORS: Kotrelov, V. N.; Opolovenkov, A. F.; Kalinina, S. P.; Kuznetsova, G.
I.; Savina, M. Ye.; Gus'kova, O. I.; Nagornaya, Yu. F.; Akutin, M. S.

ORG: none

TITLE: A method for obtaining grafted polymers. Class 39, No. 173949 [announced
by State Scientific Research Institute of Plastics (Gosudarstvennyy nauchno-
issledovatel'skiy institut plastmass)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 84

TOPIC TAGS: polymer, grafted polymer, plastic, monomer, vinyl, fluorine

ABSTRACT: This Author Certificate presents a method for obtaining grafted polymers
by grafting vinyl polymers to fluorine-containing polymers in the presence of an
initiator. Cerium ammonium nitrate is used as the initiator.

SUB CODE: NT, GC SUBM DATE: 11Feb63/ ORIG REF: 000/ OTH REF: 000

Card 1/1 UDC: 678.743.41 66.097.3:546.39

07010623

ACC NR: AT6034059

(A) SOURCE CODE: UR/0000/66/000/000/0354/0356

AUTHOR: Nagornaya, Yu. F.; Serenkov, V. I.; Stupina, L. P.

ORG: State Scientific Research Institute of Plastics (Gosudarstvennyy nauchno-issledovatel'skiy institut plasticheskikh mass)

TITLE: Investigation of the effect of the nature of metallic fillers on the radiolysis of polymeric materials

SOURCE: Simpozium po radiatsionnoy khimii polimerov. Moscow, 1964. Radiatsionnaya khimiya polimerov (Radiation chemistry of polymers); doklady simpoziuma. Moscow, Izd-vo Nauka, 1966, 354-356

TOPIC TAGS: gamma irradiation, polyethylene plastic, radiation chemistry, iron powder, plastic filler

ABSTRACT: The effect of radiation on polymer-filler systems was studied in this mass spectral examination of the radiolysis products of high pressure polyethylene P-500 and of filled polyethylene (3:1 polymer:filler). Copper, lead, nickel and two grades of iron powders were used as fillers. The samples under 10^{-5} mm Hg pressure were subjected to 100 Mrad dosage from a cobalt-60 source at room temperature. Gas evolution from irradiated filled samples was greater than from the polymer alone; the iron powder Fe₁₀₀ with larger surface area had a greater effect than the other iron

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ACC NR: AT6034059

powder: $PE/Cu > PE/Ni > PE/Fe_{100} > PE/Fe > PE$. Hydrogen was the predominant product from pure polyethylene and from the samples containing copper and nickel powders. With iron the proportion of hydrogen was reduced and the radiolysis products contained larger amounts of materials with masses of 28 and 44. Radiation in air caused the following weight changes (in %): PE 0.77; PE/Cu 1.22; PE/Pb 0.85; PE/Ni 0.29; PE/Fe 0.24; and PE/Fe₁₀₀ 0.53. Orig. art. has: 1 table.

SUB CODE: 11, 07/ SUBM DATE: 25Jul66

Card 2/2

NAGORNI, Mihajlo, dr.

Apparatus for blood taking in human. Med. arh., Sarajevo 8 no.4:
111-114 July-Aug 54.

1. Sa Klinike za kozne i spolne bolesti Medicinskog fakulteta,
Sarajevo, sa prof. dr. Flegler.

(VEINS

venipuncture, appar. for blood taking)

(SYRINGES

for blood taking in man)

NAGORNI, Vladimir

A case of primary suture of the median nerve at the level of the wrist joint. Srpski arh. celok. lek. 91 no.3:315-318 Mr '63.

1. Odeljenje za medicinsku rehabilitaciju i ortopediju Opste bolnice "Mosa Pijade" u Leskovcu Sef: dr Vladimir Nagorni.
(MEDIAN NERVE) (NEUROSURGERY)

S

NAGORNI, Vladimir

A case of synovium of the knee. Trubki arm. cel. 1. lex. '62
no. 6:669-8/1 Je '64

1. Odeljenje za medicinsku rehabilitaciju i ortopediju.
Opste bolnice "Mosa Pijade" u Leskovcu (Glavni dr.
Vladimir Nagorni).

YUGOSLAVIA

Vladimir NAGORNI, Chief, Department of Medical REhabilitation and Orthopedics of General Hospital (Odeljenje za medicinsku rehabilitaciju i ortopediju Opste bolnice), Leskovac.

"Primary Suture of N. Medianus at the Wrist."

Belgrade, Srpski Arhiv za Celokupno Lekarstvo, Vol 91, No 3, Mar 63; pp 315-318.

Abstract [French summary modified]: Case report - 41-year-old woman cut her left wrist through to the joint, severing the median nerve completely. Immediate suture with intensive physiotherapy brought essentially full functional recovery within 8 months, with only occasional residual paresthesia of fingertips. Two Yugoslav and 1 US reference.

1/1

BOGOLYUBOV, B.P., doktor tekhn. nauk; YUMATOV, B.P., doktor tekhn.
nauk; BUNIN, Zh.V., inzh.; NAGORNOV, A.M.

Features of the reconstruction of "Ugol'nyy Ruchey" open-
pit mine. Gor. zhur. no.7:9-11 JI '63. (MIRA 16:8)

1. Moskovskiy institut stali i splavov (for Bogolyubov,
Yumatov, Bunin). 2. Nachal'nik kar'yera "Ugol'nyy ruchey"
(for Nagornov).

L 47377-66 EWT(m)/EWP(w)/T/EWP(t)/ETI/EWP(k) IJP(c) JD/HW
ACC NR: AR6028571 SOURCE CODE: UR/0276/66/000/005/B047/B047

AUTHOR: Atroshchenko, E. S. ; Kofman, A. P. ; Mantaroshin, A. P. ;
Nagornov, G. M. ; Popov, N. V. ; Ryadinskaya, I. M.

TITLE: A possibility of using explosion energy for strengthening tractor lug tracks

SOURCE: Ref. zh. Tekhnologiya mashinstroyeniya, Abs. 5B314

REF SOURCE: Sb. Materialy Nauchn. konferentsii. Sovnarkhoz Nizhne-Volzhsk. ekon. r-na. Volgogradsk. politekhn. in-t. T. 1. Volgograd, 1965, 284-287

TOPIC TAGS: tractor, lug track, explosion energy

ABSTRACT: The use of explosion energy for strengthening tractor lug tracks was found to be feasible. A diagram for strengthening the lugs was shown. The use of explosive cords is considered to be the most acceptable from the engineering aspect. Studies were made of the effect of the medium on the magnitude and

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UDC: 621.789:621.81

L 47377-66

ACC NR: AR6028531

character of strengthening and of the effect of alignment of cords on the uniformity of strengthening along the circumference of the lugs. Casting defects in the tracks can lead to the failure of a lug. Orig. art. has: 3 reference items. [Translation of abstract] [FM]

SUB CODE: 13/

Card 2/2

mjs

MAGORNOV, K.I.

Controlling marine rodents at their spring concentration sites
[with summary in English]. Zool. zhur. 38 no.2:290-293 F '59.
(MIRA 12:3)

1. Penza Agricultural Institute.
(Penza Province--Rodent control)

BOLOTIN, V.V., doktor tekhn. nauk, prof.; MAKAROV, B.P., kand. tekhn. nauk;
MISHENKOV, G.V., kand. tekhn. nauk; NAGORNOV, L.N., inzh.;
POMAZI, L., aspirant

Some problems of dynamic stability of elastic rings subjected
to sudden loading. Izv. vys. ucheb. zav.; mashinestr. no.6:
76-82 '65. (MIRA 18:2)

1. Moskovskiy energeticheskiy institut.

^I
NAGORNOV, N.; GREBNEV, V.

Operating clarification tanks designed by the All-Union Scientific Research Institute of Hydraulic and Sanitary Engineering of the Ministry of Construction. Zhil.-kom.khoz. 6 no.4:13-15 '56.
(MLRA 9:8)

1. Glavnyy inzhener Upravleniya vodosnabzheniya i kanalizatsii goroda Gor'kogo (for Nagornov); 2. Tekhnicheskiy rukovoditel' Kuybyshevskoy vodoprovodnoy stantsii goroda Gor'kovo (for Grebnev)
(Water--Purification)

PISKUNOV, Pavel Ivanovich, prof., doktor tekhn.nauk; MAGORNOV, Nikolay
Ivanovich; PERLINA, A.M., red.; SHVEDOV, Yu.F., red.izd-va;
~~KOSYASHINA~~, A.D., tekhn.red.

[Operation of clarifiers with suspended filters] Praktika
eksploatatsii osvetlitelei so vsveshennym fil'trom. Moskva,
Izd-vo M-va kommun.khoz.RSFSR, 1957. 48 p. (MIRA 11:1)

1. Glavnyy inzhener Gor'kovskogo vodoprovoda.
(Water--Purification)

NAGORNOV, N. P.

CP

[illegible]

ASB SLA METALLURGICAL LITERATURE CLASSIFICATION

NAGORNOV, N.P. and POPOV, A.A.

"Strukturnyye Prelrashcheniya i Mekhanicheskie Svoystva
Khromonikel " Molnbdenovykh Staley (Structural Transformations
and Mechanical Properties of Chromium-Nickel-Molybdenum Steels),
" Problemy Konstruktsionnoi Stali" Mashgiz, 1949

1143-R111, 11-5

PHASE I TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 361 - I

Call No.: TN672.V8

BOOK

Author: NAGORNOV, N. P.

Full Title: STEEL FOR LARGE ROLLERS IN THE COLD ROLLING WORKS

Transliterated Title: Stali dlya krupnykh valkov kholdnoy prokatki

Publishing Data

Originating Agency: All-Union Scientific Engineering and Technical Society of Machine Builders. Urals Branch

Publishing House: State Scientific and Technical Publishing House of Machine Building Literature ("Mashgiz")

Date: 1950

No. pp.: 7

No. of copies: 3,000

Text Data

This is an article from the book: VSESOYUZNOYE NAUCHNOYE INZHENERNO-TEKHNICHESKOYE OBSHCHESTVO MASHINOSTROITELEY. URAL'SKOYE OTDELENIYE, THERMAL TREATMENT OF METALS - Symposium of Conference (Termicheskaya obrabotka metallov, materialy konferentsii) (p.335-341), see AID 223-II

Coverage: A study of thermal treatment of two groups of Soviet steels (9Kh and 9Kh2) is described and the test result analysed for suitability of the treated steels for large rollers in cold rolling. Resilience and depth of penetration of the tempering into the mass of the roller are considered as the major determinant for suitability of material.

5 charts and 3 tables.

1/2

. Stali dlya krupnykh valkov kholdnoy prokatki

AID 361 - I

Purpose: For scientific workers

Facilities: None

No. of Russian and Slavic References: None

Available: Library of Congress.

2/2

NAGORNOV, V.A.

Equation of motion of nonholonomic mechanical systems on nonholonomic coordinates. Izv. AN Uz. SSR. Ser.fiz.-mat.nauk no.6:65-81 '58. (MIRA 12:2)

1. Sredneaziatskiy gosudarstvennyy universitet imeni V.I. Lenina.
(Dynamics)

S/124/63/000/001/002/080
D234/D308

AUTHORS: Shul'gin, M.F. and Nagornov, V.A.
TITLE: Poincare-Voronets equations and their integration
PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 1, 1963, 11,
abstract LA67 (Tr. Tashkentsk un-ta, 1961, no. 189,
155-176)

TEXT: The authors present some properties of Poincare's
equation for holonomic systems, established by N.G. Chetayev. 15
references. (Abstracter's note: The authors' proposition that the
structural coefficient c_{jki} for holonomic systems can be variable,
is disproved by the theory of Lie's groups).
[Abstracter's note: Complete translation]

Card 1/1

NAGORNOVA, K.G., inzhener; SEVORTSOV, S.O.

Leading workers of the Syava Wood Chemistry Combine. Der. i lesokhim.prom.
2 no.7:25-27 J1 '53. (MLBA 6:5)

1. Sysvskiy lesokhimicheskiy kombinat (Nagornova). no-issledovatel'skaya laboratoriya KhI.
2. Tsentral'nyya nauch-
(Wood--Chemistry)

NAGORNOVA, Ye.P., assistant; SMOLENSKAYA, V.V., assistant; FROLOVA, N.A.,
dotsent

Physical development of the schoolchildren of Kalinin. Trudy
KGMI no.10:12-15 '63. (MIRA 18:1)

1. Iz kafedry obshchey gigiyeny (zav. kafedroy dotsent K.A.
Ivanov) i kafedry organizatsii zdavookhraneniya (zav. kafedroy -
dotsent N.A.Frolova) Kalininskogo gosudarstvennogo meditsinskogo
instituta.

107-71, Vol. 1, 1971, p. 1.

"Anglo-Soviet relations in the context of the Cold War,"

report published at the 1st International Conference on the History of the USSR and the USSR, 1971.

NAGORNOVA, Ye.P.

Dust content of the air in Kalinin and street eye injuries.

Uch. zap. Mosk. nauch.-issl. inst. san. i gig. no.6:91-92 '60.

(MIRA 14:11)

1. Kafedra obshchey gigiyeny Kalininskogo meditsinskogo instituta.
(KALININ—DUST) (EYE—WOUNDS AND INJURIES)

ATOYAN, K.M.; KRAKOVETSKIY, M.S.; MAGORNYAK, G.A.; OSEPCHUGOV, V.V.,
kand.tekhn.nauk; AVSHAROVA, Ye.G., red.izd-va; EL'KIND, V.D.,
tekhn.red.

[The LAZ-695B "L'viv" motorbus; construction and servicing]
Avtobus LAZ-695B "L'viv"; ustroiatvo, obsluzhivanie. Pod red.
V.V.Osepchugova. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.
lit-ry, 1960. 185 p. (MIRA 13:12)
(Motorbuses)

NAGORNYAK, G.A

Device for dismounting and mounting engines of the LAZ motor-
buses. Avt.transp. 38 no.1:28-30 Ja '60.

(MIRA 13:5)

(Motorbuses--Engines--Maintenance and repair)

ATOYAN, Karp Mironovich, kand. tekhn. nauk; NAGORNYAK, Georgiy
Andreyevich, inzh.; GRINBERG, P.I., red.

[Operation of the LAZ motorbuses] Ekspluatatsiia avtobu-
sov LAZ. Moskva, Izd-vo "Transport," 1964. 109 p.
(MIRA 17:4)

NAGORNYAK, G.A.

Using V-engines for the L'vivskiy zavod, L'viv, U.S.S.R. No. 2:
6-7 Ag 1944. VTS 1711

1. L'vivskiy avtobusnyy zavod.

TURUK, A.I., inzh.; ANISIMOV, B.N.; NAGORNYAK, G.A.; ATCYAN, K.M.,
kand. tekhn. nauk, red.

[Catalog of spare parts for the LAZ-695E "L'viv" and LAZ-697E
"Tunist" motorbuses] Katalog zapasnykh chastei avtobusov
LAZ-695E "L'viv" i LAZ-697E "Tunist." Moskva, Mashinostroenie,
1965. 319 p. (MIRA 18:5)

1. L'vovskiy avtobusnyy zavod. 2. Konstruktorsko-eksperimen-
tal'nyy otdel L'vovskogo avtobusnogo zavoda (for Turuk,
Anisimov, Nagornyak).

ATGYAN, K.M., kand. tekhn. nauk; GENBCH, B.B., kand. tekhn. nauk;
BIBICH, Yu.I., kand. tekhn. nauk; L. M. LUK, V.L.; P. LUK, V.L.;
L. L.; NIKITIN, N.N.; PYZOV, A.V.

Power consumption for driving auxiliary units and for driving
the traction and speed characteristics of the LEM motor.
Art. proc. 31 no.3:30-32 in 1955.

L. D'vovskiy politekhnicheskoy institut. L. D'vovskiy
zaved.

ATOYAN, K.M., kand.tekhn.nauk; GENBOM, B.B., kand.tekhn.nauk; DROBOT, Yu.I.,
kand.tekhn.nauk; BRAZ, A.S.; NAGORNYAK, G.A.

Design and efficiency of the engine brake of the LAZ motorbuses
with carburetor V-engines. Avt.prom. 31 no.4:8-11 Ap '65.

(MIRA 18:5)

1. L'vovskiy politekhnicheskii institut i L'vovskiy avtobusnyy
zavod.

L38698-66 EWP(●)/EWT(m)/EWP(v)/T WW/WH

ACC NR: AR6014539

SOURCE CODE: UR/0196/65/000/011/B011/B011

AUTHOR: Tsingarelli, Ye. P.; Nagornyakova, G. A.

TITLE: Electric insulation material "Asbophomalit"⁵ (Aph) 45 13

SOURCE: Ref. zh. Elektrotehnika i energetika, Abs. 11B72

REF SOURCE: Sb. nauchn. tr. Gos in-t po proyektir. i issled. vzryvobezopasn. elektrooborud. Giproniselektroshakht, vyp. 1, 1964, 191-193

TOPIC TAGS: composite material, insulating material / Asbophomalit insulating material

ABSTRACT: Characteristics of Aph are described; the material consists of asbestos¹⁵ paper or fiber impregnated with aluminum phosphates. Aph is used for making slabs, cylinders, and other shapes by a relatively simple method. Aph can be used in dry rooms at temperatures of 180--250C. Aph has good dielectric characteristics, and is arc- and fire-resistant. Under humid conditions, the Aph parts should be protected by moisture-resistant coatings. Two figures. One table. V. Bondarenko [Translation of abstract]

SUB CODE: 09, 11/

Card 1/1 Sm

UDC: 621.315.613.2

CHIBISOV, V.D., kand. ekonom. nauk, dotsent; NAGORNYKH, I.A., aspirant.

Organization of and norm setting for the working capital in the
shoe industry. Kozh.-obuv.prom. 5 no.10:2-10 0 '63.

(MIRA 17:4)

1. Khar'kovskiy universitet imeni Gor'kogo (for Nagornykh).

NAGORNYKH, I.A.

Efficient use of the working capital. Kozh.-obuv. prom. 6 no.4:
4-7 Ap'64. (MIRA 17:5)

CHIRISOV, V.I., doctent, kand. ekonom. nauk, N. GORNYKH, I.I., aspirant.

Organization and working capital norm setting for the material reserves of the enterprises of the textile industry. Thesis, prom. 24 no. 8. 1980. 12 p. 164.

1. Khar'kovskaya akademiya imeni V.I. Lenina, Gosstatizdats Ukrainy.
2. Khar'kovskiy universitet (for Ukr. SSR).

NAGORNYKH, M.O., uchitel'; OLEYNIK, Ye.I., agronom (Odesskaya oblast',
Starokazatskiy rayon, s. Semenovka.

Experiment in growing perennial feed grasses. Biol. v shkole
no. 1:49-50 Ja-F '61. (Grasses) (MIRA 14:4)

ZABUSELOV, N. (Novokuznetsk); NAGORNYI, A.; BRYZGALOV, P.; SHABLOV, V.
(Vologda); LARIONOV, dotsent (Moskva); MIROSHNICHENKO, V.
(Sverdlovskaya obl.)

Readers' letters. Pozh. delo 9 no.9:30-31 S '63. (MIRA 16:10)

1. Sotrudnik Rostovoskogo-na-Donu Upravleniya pozharnoy okhrany
(for Nagornyy). 2. Nachal'nik Yelabuzhskoy gorodskoy pozharnoy
chasti, Tatarskaya ASSR (for Bryzgalov).
(Fire prevention)

VYSOCHIN, M.; NAGORNY, A.

We will reach the 200 million figure! Pozh. delo 9 no.6:11-
12 Je '63. (MIRA 16:8)

1. Zamestitel' nachal'nika Upravleniya pozharnoy okhrany,
Rostov-na-Donu (for Vysochin). 2. Inspektor Upravleniya
pozharnoy okhrany, Rostov-na-Donu (for Nagornyy).

NAGORNY, A A-

AID P - 3052

Subject : USSR/Mining
Card 1/1 Pub. 78 - 6/20
Author : Nagornyy, A. A.
Title : To improve the utilization of motors used in drilling
Periodical : Neft. khoz., v. 33, no. 8, 29-32, Ag 1955
Abstract : In cases where electricity is not available the motor V2-300 is used for drilling works. The author emphasizes the necessity of proper care of this motor, frequent check-ups and overhauls to be made in proper time and the necessary training for the service crew.
Institution : None
Submitted : No date

NAGORNYY, Aleksey Afanas'yevich; MALYSHEV, Konstantin Nikolayevich;
SHAYDNEROV, B.M., redaktor; BEKMAN, Yu.K., vedushchiy redaktor;
TROFIMOV, A.V., tekhnicheskiy redaktor

[Organization of preventive repair of equipment used in the
petroleum industry; a reference manual] Organizatsiia planovo-
predupreditel'nogo remonta neftepromyslovogo oborudovaniia;
spravochnik. Moskva, Gos.nauchno-tekhn. izd-vo nef. i gorno-
toplivnoi lit-ry, 1957. 269 p. (MIRA 10:7)
(Petroleum industry--Equipment and supplies)